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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,001	01/30/2001	Toshihiko Fujii	KOJIM-364	8476

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EXAMINER

HUFF, MARK F

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/772,001
Filing Date: January 30, 2001
Appellant(s): FUJII ET AL.

MAILED

JAN 31 2005

GROUP 1700

Csaba Henter
For Appellant

SUPPLEMENTAL EXAMINER'S ANSWER

This is in response to the Decision and Remand by the Board of Patent Appeals and Interferences mailed on September 30, 2004.

SUPPLEMENTAL EXAMINER'S ANSWER

In view of the Board Decision of September 30, 2004 the previous rejection under 35 USC 103 has been reversed.

Pursuant to the remand under 37 CFR 41.50(a)(1) by the Board of Patent Appeals and Interferences on September 30, 2004 **for further consideration of a rejection**, a supplemental Examiner's Answer under 37 CFR 41.50(a)(2) is set forth below:

In the Decision dated September 30, 2004, the Board remanded the application for consideration of three references. The below noted new ground of rejection is in response to that remand.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US 5,668,210) in view of Kirk-Othmer Encyclopedia of Chemical Technology and Steinmetz.

Harris establishes that it was known in the art to use hydrolyzed alkoxysilanes as adhesion promoters or coupling agents for various polymeric materials at column 1, lines 19-21. According to Harris, the hydrolyzed alkoxysilanes are typically used as primer layers between substrates and polymeric materials (col. 1, lines 21-25). Therefore, Harris provides evidence that hydrolyzed alkoxysilane coupling agents were known for use as primers. Additionally, Harris teaches patterning using a photodefinable polymer (also known as a photoresist) that can be patterned using conventional radiation wavelengths (see column 6 lines 26-31).

Kirk-Othmer Encyclopedia of Chemical Technology at page 150 in Table 3 lists 3-aminopropyltriethoxysilane, N-(2-aminoethyl)-3-aminopropyl trimethoxysilane, and 3-glycidopropyltrimethoxysilane as commercial silane coupling agents. See entries 4-6 and 8 of Table 3. These coupling agents have the functional groups required by the claims and are within the alkoxysilane class of Harris.

Steinmetz provides further evidence that use of hydrolyzed organosilane coupling agents as primers on metal oxide as well as silicon oxide surfaces was known and that the organosilane is usually dissolved in alcohol.

It would have been obvious to use the organosilane as taught in Harris and Kirk-Othmer as adhesion primers, since both Harris and Steinmetz clearly teach that these

Art Unit: 1756

compounds are useful as primer layers, with the reasonable expectation of achieving improved adhesion between a photoresist layer and a substrate.

The appellant must within **TWO MONTHS** from the date of the supplemental examiner's answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the rejection for which the Board has remanded the proceeding:

(1) **Reopen prosecution.** Request that prosecution be reopened before the examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit, or other evidence. Any amendment, affidavit, or other evidence must be relevant to the issues set forth in the remand or raised in the supplemental examiner's answer. Any request that prosecution be reopened will be treated as a request to withdraw the appeal. See 37 CFR 41.50(a)(2)(i).

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. If such a reply brief is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened under 37 CFR 41.50(a)(2)(i). See 37 CFR 41.50(a)(2)(ii).

Extensions of time under 37 CFR 1.136(a) are not applicable to the **TWO MONTH** time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.


Conclusion

Any inquiry concerning this communication should be directed to Mark F. Huff at telephone number 571-272-1385.

A handwritten signature in black ink, appearing to read 'Mark F. Huff', with a long, sweeping horizontal stroke extending to the right.

Mark F. Huff
Supervisory Patent Examiner
Art Unit 1756

A Technology Center Director or designee has approved this supplemental examiner's answer by signing below:

A handwritten signature in black ink, appearing to read 'Michael W. Ball', with a stylized, cursive script.

Michael W. Ball
Director, Technology Center 1700